



Pipeline

PIPELINE is a community newsletter published by the Lakeside Water District.

JUNE 2013

LAKESIDE'S WATER SUPPLY: PAST AND PRESENT

The way we receive our water has changed many times over the years. When Lakeside Water District was formed in 1924 as an Irrigation District, groundwater and a connection to the Cuyamaca Water Company were our only sources.

In the early 1940s, as the community expanded, Lakeside Water District teamed up with eight other agencies to form the San Diego County Water Authority (WA) which brought water from the Colorado River to the county. In the 1950s, Lakeside had a firm entitlement to imported water and its first large subdivision was developed in Eucalyptus Hills.

As the county and the community continued to grow, new ways to deliver water were implemented. Besides the connections to the WA we also had connections to the Helix Water District to aid in distribution. The water we were delivered was untreated and then chlorinated at our points of connection. This all changed in the mid-1970s when the water was filtered and chlorinated prior to delivery to the county.

Growth continued to boom throughout the 60s, 70s and 80s, but a new factor came into play: drought. When we thought we had an unlimited supply of water we now had to consider the reality of limited supplies. After the rains of Miracle March in 1993 ended a severe drought, decisions were made by the WA to ensure that



The town of Lakeside, about 1910.

the county would diversify from importing 90% of our water from the Metropolitan Water District. A diversification plan was formulated that would maximize local sources, and look at new ways to distribute Colorado River water in California.

Established in 2003, the groundbreaking Quantification Settlement Agreement, allows the WA and the Imperial Irrigation District to receive water conserved through lining parts of the All-American and Coachella canals and farming conservation. In 2011, these agreements brought 160,000 acre-feet of water to the region. When the water deliveries are fully ramped up in 2021, San Diego County will receive 280,000 acre-feet per year.

To ensure the ability of the County to endure droughts and earthquakes, the WA implemented the Emergency Storage Project; a system of reservoirs,

interconnected pipelines, and pumping stations designed to make water available in the event of an interruption of imported water deliveries. The cornerstone of the project right here in our own backyard is the San Vicente Lake Dam Raise, increasing capacity from 90,000 to 242,000 acre feet.

We have increased storage and designed a more reliable delivery system plus more improvements are currently in progress. The Carlsbad Desalination Project, a landmark 50 million-gallons-per-day reverse osmosis filtration plant that will turn seawater into high quality drinking water, is scheduled to come on line in 2017.

As can be expected, a more balanced and dependable water supply comes with a price, but be assured that Lakeside Water District will do everything possible to control these new costs.

LAKESIDE WATER DISTRICT CONSUMER CONFIDENCE REPORT

Test Results from Calendar Year 2012

(Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.)

PARAMETERS	UNITS	STATE OR FEDERAL MCL [MRDL]	PHG (MCLG) [MRDLG]	STATE DLR	RANGE AVERAGE	LAKESIDE WELLS	HELIX PLANT	SKINNER PLANTS	
Percent State Project Water	%	NA	NA	NA	Range Average	NA NA	6-52 % 20 %	33-84% 63%	
PRIMARY STANDARDS: Mandatory Health-related Standards									MAJOR SOURCES IN DRINKING WATER:
CLARITY:									
Combined Filter Effluent Turbidity	NTU %	0.3 95 (a)			Highest % < 0.35	.19 100 %	.16 100 %	.06 100 %	Soil runoff
MICROBIOLOGICAL:									
Total Coliform Bacteria (b)	Distribution System-wide %	5.0	(0)	NA	Range Average	ND ND	ND ND	ND-.05 .01	Naturally present in the environment
E. coli	Distribution System-wide (c)	(c)	(0)	NA	Range Average	0.0 ND	0.0 ND	0.0 ND	Human and animal fecal waste
INORGANIC CHEMICALS:									
Aluminum (d)	ppb	1000	600	50	Range Highest RAA	ND-67.1 16.8	81-85 83	ND ND	Residue from water treatment process; natural deposits erosion
Arsenic	ppb	10	0.004	2	Range Highest RAA	ND-1.78 0.75	ND ND	ND ND	Natural deposits erosion; glass and electronics production wastes
Barium	ppb	1000	2000	100	Range Average	124-295 208	NT NT	ND ND	Oil and metal refineries discharge; natural deposits erosion
Flouride (e) Treatment-related	ppm	2.0	1	0.1	Control Range Optimal Level		0.7-1.3 0.8	0.7-1.3 0.8	Water additive
					Range Average	.06-1.0 0.7	.07-.09 0.8	0.7-0.9 0.8	Lakeside has (naturally occurring) Flouride from erosion of natural deposits
					Range Highest RAA	.005-.5 .016	ND-.21 .21	ND ND	Runoff/leaching from fertilizer use; septic tank/sewage; natural deposits erosion
Nitrate (as N)	ppm	10	10	0.4					
RADIOLOGICALS:									
Gross Alpha Particle Activity	pCi/L	15	(0)	3	Range Average	4.36-8.06 6.7	ND-4.5 ND	ND-3 ND	Erosion of natural deposits
Gross Beta Particle Activity (f)	pCi/L	50	(0)	4	Range Average	ND ND	ND ND	ND-5 ND	Decay of natural and man-made deposits
Uranium	pCi/L	20	0.43	1	Range Average	4.5-6.7 5.8	ND-1 1	ND-2 1	Erosion of natural deposits
DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCTS PRECURSORS (g):									
Total Trihalomethanes (TTHM) (g)	Distribution System-wide ppb	80	NA	1	Range Average	19-69 38.8	20-51 46.5	10-19 14	By-product of drinking water chlorination
Haloacetic Acids (five) (HAA5) (g)	Distribution System-wide ppb	60	NA	1	Range Average	ND-15 7.5	4.2-18.3 10.1	1.4-6.1 2.7	By-product of drinking water chlorination
Total Chlorine Residual	Distribution System-wide ppm	[4.0]	[4.0]	NA	Range RAA	1.4-1.9 1.68	0.1-3.0 1.8		Drinking water disinfectant added for treatment
DBP Precursors Control (TOC)	ppm	TT	NA	0.30	Range Average	NA NA	TT TT	TT TT	Various natural and man-made sources
SECONDARY STANDARDS: Aesthetic Standards									
Aluminum (d)	ppb	200	NA	50	Range Highest RAA	ND-67.1 16.8	130-260 165	ND ND	Residue from water treatment process; natural deposits erosion
Chloride	ppm	500	NA	NA	Range Highest RAA	197-291 236	75-95 87	75-77 76	Runoff and leaching from natural deposits; seawater influence
Color	Units	15	NA	NA	Range Highest RAA	ND-1.0 <1.0	1-2 1	1-2 1	Naturally occurring organic materials
Odor Threshold (h)	TON	3	NA	NA	Range Average	ND-1.0 <1.0	1 1	3-24 2	Naturally occurring organic materials
Specific Conductance	µS/cm	1600	NA	NA	Range Highest RAA	1030-1770 1562	510-840 713	440-780 640	Substances that form ions in water; seawater influenice
Sulfate	ppm	500	NA	0.5	Range Highest RAA	213-285 237	130-180 160	96-120 110	Runoff and leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	ppm	1000	NA	NA	Range Highest RAA	772-1101 906	320-410 365	360-400 380	Runoff and leaching from natural deposits; seawater influence
Turbidity (a)	NTU	5	NA	NA	Range Highest RAA	.03-.10 .06		ND-.1 ND	Soil runoff
FEDERAL UNREGULATED CONTAMINANTS MONITORING RULE (UCMR2) (i):									
List 1 - Assessment Monitoring						ND	ND	ND	
List 2 - Screening Survey						ND	ND	ND	
OTHER PARAMETERS									
CHEMICAL:									
Alkalinity	ppm	NA	NA	NA	Range Highest RAA	191-300 230	94-160 120	75-110 93	Runoff and leaching from natural deposits; industrial wastes
Boron	ppb	NA	NL=1000	100	Range Highest RAA	68.7-91.4 75.4	140 140	130 130	
Calcium	ppm	NA	NA	NA	Range Highest RAA	105-144 123	47-54 51	34-41 38	By-product of drinking water chlorination; industrial processes
Chlorate	ppb	NA	NL= 800	20	Range Range	NA NA	NA NA	ND-80 50	
Chromium VI (j)	ppb	NA	NA	1	Range Highest RAA	ND ND	ND ND	ND ND	Industrial waste discharge; could be naturally present as well
Corrosivity (k)					Range	12.0-12.5	NA	12.2-12.3	Elemental balance in water; affected by temperature and other factors

(as Aggressiveness Index)	AI	NA	NA	NA	Average	12.1	NA	12.2	
Hardness	ppm	NA	NA	NA	Range	515-700	200-240	120-220	Municipal and industrial waste discharges
					Highest RAA	609	220	170	
					Range	54-66	19-24	15-17	
					Highest RAA	61	22	16	
Magnesium	ppm	NA	NA	NA	Range	6.9-7.2	8.1-8.4	8.1-8.5	Various natural and man-made sources
pH	Units	NA	NA	NA	Average	7.03	8.2	8.3	
					Range	NA	3.8-4.6	3.4-3.6	
					Highest RAA	NA	4.3	3.5	
Potassium	ppm	NA	NA	NA	Range	109-141	70-86	65-66	Naturally-occurring; industrial waste discharge
Sodium	ppm	NA	NA	NA	Highest RAA	129	78	66	
					Range	NA	1.7-3.3	1.8-2.3	
					Highest RAA	NA	2.3	2.1	
TOC	ppm	TT	NA	0.30	Range	ND-19	3.2-3.4	ND	By-product of drinking water chloramination; industrial processes
Vanadium	ppb	NA	NL=50	3	Average	8	3.3	ND	
N-Nitrosodimethylamine (NDMA)	ppt	NA	3	2	Range	NA	ND-.003	ND-2.8	
					Range	NA	ND	ND-6.7	

LEAD AND COPPER TESTING: Number of Sample Sites = 30. The 90th Percentile Levels = ND for Lead and .13 ppm for Copper. Number of sites above action level of 15 ppb Lead and 1.3 ppm Copper = 0. Lead and Copper tested for in June 2010.

ABBREVIATIONS AND FOOTNOTES

ABBREVIATIONS

AI	Aggressiveness Index	NTU	Nephelometric Turbidity Units
AL	Action Level	P or ND	Positive or Not Detected
CFU	Colony-Forming Units	pCi/L	picoCuries per Liter
DBP	Disinfection By-Products	PHG	Public Health Goal
DLR	Detection Limits for Reporting	ppb	parts per million or micrograms liter (µg/L)
MCL	Maximum Contaminant Level	ppm	parts per million or milligrams per liter (mg/L)
MCLG	Maximum Contaminant Level Goal	ppq	parts per quadrillion or picograms per liter (pg/L)
MRDL	Maximum Residual Disinfectant Level	ppt	parts per trillion or nanograms per liter (ng/L)
MRDLG	Maximum Residual Disinfectant Level Goal	RAA	Running Annual Average
N	Nitrogen	SI	Saturation Index (Langelier)
NA	Not Applicable	TOC	Total Organic Carbon
ND	Not Detected	TON	Threshold Odor Number
NL	Notification Level	TT	Treatment Technique
		µS/cm	microSiemen per centimeter or micromho per centimeter (µmho/cm)

FOOTNOTES

- The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. The averages and ranges of turbidity shown in the Secondary Standards were based on the treatment plant effluent.
- Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive.
- E. coli* MCL: The occurrence of two consecutive total coliform-positive samples, one of which contains *E. coli*, constitutes an acute MCL violation. The MCL was not violated.
- Aluminum has both primary and secondary standards.
- MWD, Helix and Lakeside were in compliance with all provisions of the State's Fluoridation System Requirements.
- The gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.
- MWD, Helix, and Lakeside were in compliance with all provisions of the Stage 1 Disinfectants/Disinfection By-Products (D/DBP) Rule. Compliance was based on the RAA.
- Metropolitan utilizes a flavor-profile analysis method that can detect odor occurrences more accurately.
- Helix data collected over four quarters in 2008. MWD Data collected in November 2008.
- Chromium VI reporting level is 0.03 ppb.
- AI <10.0 = Highly aggressive and very corrosive water. AI > 12.0 = Non-aggressive water. AI (10.0 - 11.9) = Moderately aggressive water.

LAKESIDE WATER DISTRICT (619) 443-3805

BOARD OF DIRECTORS President: Bruce Robertson Vice President: Frank Hilliker

Directors:
Pete Jenkins
Steve Johnson
Eileen Neumeister

General Manager:
Brett Sanders

Our Board meets at the District office on the first Tuesday of each month at 5:30 p.m.

Bill Payment Options

Online: Credit card and electronic check payments may be paid online at www.lakesidewaterdistrict.com.

Autopay: Pay automatically from your checking account. Sign up online www.lakesidewaterdistrict.com.

By Phone: Credit card or electronic check payments may be placed using our automated phone system by calling (619) 443-3805, extension 3.

Drop Box: Payments may be placed in the black drop box in front of the office.

In Person: Cash payments may be paid in our office on business days, between 8:00am and 5:00pm.

With each method, you will need your account number as it appears on your bill.

CONSUMER CONFIDENCE REPORT: Educational Information

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Lakeside Water District's groundwater source is the Santee-El Monte Basin, a groundwater source for many in our community. The basin provides good water quality that has small amounts of iron and manganese which we remove with a specially designed treatment plant located at our Administration and Operations facility at 10375 Vine Street, Lakeside. A source water assessment detailing potential sources of contamination completed in January 2010 is available for review upon request at the District office.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Lakeside Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Drinking Hotline or by visiting the government site: www.epa.gov/safewater/lead.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791. If you should have any questions about the CCR or water quality in general, please call Lakeside Water District at 619-443-3805.

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Lakeside, CA 92040-2440



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